Production and Profits

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THE influence of production on profits has always been obvious and methods of reducing costs by increasing production have received very general attention since Mr. F. W. Taylor's careful analysis of the factor of overhead expense; but the influence of profits on production, though always a very real factor in industrial engineering, becomes obvious only under special conditions. In England during the war, in those cases where the earnings of the wage worker were increased to a point sufficient to fulfill all his ordinary desires, the final disposition of the profits arising in connection with his efforts became a very real force in spurring him on or holding him back. In spite of possibilities of increasing his own earnings, a normal human being will find his efforts lessened by the knowledge that he is also increasing an already liberal return to some absent stockholder; or will be moved to demand a larger share for himself and to stop work in support of that demand, and even to relax his efforts after the demand has been granted. On the other hand, there are millions of instances the world over of almost superhuman energy given forth week in and week out for four long years where the sole advantage beyond the pay envelope accrued to the worker's country and its allies.

American business men have taught their fellows that each business venture is an undertaking for profits and that they cannot be surprised if the profits of a business and the people to whom they go are subjects of real interest to every employee. Wherever, to the minds of employees, the distribution of profits has the flavor of justice, of a reasonable connection of cause and effect, of reward and dessert, the great majority of them feel a mild sense of satisfaction. None but that almost negligible percentage of true radicals, which is always with us, begrudges the reward of an Edison, a Vail or a Henry Ford, nor the reasonable reward of those who have risked their money in useful ventures. However, unrest begins and restless propositions arise where increased profits are known to be going to those who are inactive and whose public service is invisible.

Today, when production to support life is as seriously needed by the world as was production to destroy life during the war, this influence of the distribution of profits upon the primary agent of production is a challenge to all men interested in the profession of management. When we have to face any of the mechanical problems which the industrial process presents to us by the hundred thousand, we know that a careful analysis of causes and effects of the elemental forces and their interrelations is essential and we waste no time in cursing the crotchet of the machine or the crankiness of the material, but set to work finding the sources of trouble. Not so many managers have yet learned the value of maintaining the same clear-sighted, common-sense attitude when the problem lies within the field of labor. Yet it is obvious that the forces at work, brewing and stewing among a thousand employees, are as vital or as fatal as those in any electric furnace. I know many

managers who will say that presently the strain upon the labor market will ease, reducing the worker again to a position in which his annual earnings will be hardly more than enough to support his family, and enhancing in his mind, therefore, the importance of the monetary incentive. Such will undoubtedly be the case; but exceptional management will foresee that when the labor market eases the present seller's market will disappear, and every economy in production will be needed to make up for the losses of reduced output and the desperation prices of competitors. Facing this situation frankly and without whining, the wide-awake manager will find himself confronted with a new opportunity to use the power of an indirect economic incentive, which will demand from his staff as thorough and daring an analysis as the work Mr. Taylor applied to the problem of production as connected with the direct economic incentive.

At the very first of such an analysis the manager will find himself facing the whys and wherefores of the present form of corporate organization. He will discover that originally the forming of corporations was supposed to be a problem for the lawyer only and, in fact, it was chiefly, but that today the correct legal conception of a corporation as a fund of money in a statutory suit of clothes leaves some very essential factors out of account. He will find that corporate structure calculated to respond to all sorts of stresses and strains is as much a matter for scientific planning as are the foundations of his buildings and furnaces.

PROFITS

Three matters of primary importance to the corporation are the ownership of its property, the distribution of its profits and the control or management of its affairs. The distribution of profits can be looked at from two points of view by the industrial engineer: the possible effects of profit distribution in stimulating an increase of efficiency, and the harmonizing of the distribution of any shares in the profits fund with the ordinary conceptions of justice or dessert. These points of view are rather closely related, but worth keeping apart during the early stages of analysis; they run eventually very close together because of the important though frequently concealed effects upon efficiency of a gratified or outraged sense of justice.

From the efficiency or dynamic point of view we find a rather sharp distinction between the investor and the group of active workers for the corporation. The investor's service is performed in a single act but after it is once performed it cannot be stimulated to a greater or less efficiency by a fluctuating return. The interests of the corporation may demand renewed supplies of investment capital, but it is usually possible to make appropriate terms and conditions to suit each similar need. Services of the workers on the other hand, whether of managers or managed, is a continuing act necessarily varying in effectiveness from day to day in response to a great complex of influences, physical, physiological, psychological, and worse. Such services are, therefore, peculiarly apt to be spurred by a fluctuating reward.

Sound engineering would therefore seem to indicate that the investor be traded with so far as possible on the basis of some fixed return, immediate or future, as is now the case with bondholders and preferred stockholders; that the managerial forces be given compensation, a significant part of which shall fluctuate closely in accord

with the fluctuation of profit; that labor be hired on base rates and piece rates to vary with such variation of individual values as are measurable, and, in addition, shall receive a return of secondary importance which shall be dependent upon labor's share in management and the varying success of management as shown in the profits account.

From the more static point of view of abstract justice, little will be found to conflict with the requirements of efficiency. The agreement with the investor for his reward must include consideration of the use of his service—capital, the degree of risk of loss to which he is subjected, and a further return depending upon the degree of control he exercises in choosing management and policies. These three considerations together may, in any given case, amount to a very considerable rate which cannot be earned in the early years of the corporation's activities. The contract, nevertheless, should be a definite one, including at some period a virtual maximum. The agreement with the managerial forces must take into account their training and experience, the risk of unemployment due to failure of the enterprise, and the value of their services, and must also include some portion of the profits, which beyond question the managerial forces are a determining factor in making. The agreement with the labor forces must in the same way consider training and experience, measurable individual abilities and such plus values as the spirit of coöperation, freedom from need of supervision and special quality of output. Length of service calls for special consideration, usually best detached from the weekly payments dependent upon the foregoing factors. Finally, wherever the labor forces as a group have a significant share in developing the policies of management, it is just that a proportionate and appropriate share in the profits be provided.

It is perhaps unnecessary to warn that in all the foregoing it is important to distinguish strictly between the investor function and the manager function even where both may be, as they so often are exercised by the same individuals. The investor's status may be passed along by will or by his own act to whomever he pleases; except in the most autocratic examples of corporate structure. This is not true of manager's rights and status; hence the two at any time may become entirely separate and must always, therefore, be so regarded.

CONTROL

A consideration from the engineering point of view of the factors of control follows along much the same lines. That kind of control is not necessary to the simple investment function as proved by the existing millions of non-voting bonds and non-voting preferred stocks. Control, however, has a definite correlation to degree of risk and a share in control is an appropriate function of the investor in the early stages of the normal corporation and at any time if preferred stocks or bonds find their agreed rewards endangered. Control still more clearly is correlated to knowledge and experience in the affairs of the corporation and is therefore particularly appropriate for the managerial group. It is, of course, true that knowledge of general business principles is desirable on any board of directors, but it is equally true that this knowledge can as wisely be obtained by the travel and study of the man who also knows the peculiar problems of the corporation itself as by the man who gains a balance-sheet knowledge of many corporations and a production knowledge of none. In

considering the degree of control appropriate to the managerial group in any specific case, it is wise so to define this group as to bring within it a considerable number of those trained men upon whose creative efforts the success of the corporation depends. Conceiving of the managerial group as including such grades as principal salesmen and principal foremen adds factors of breadth and of safety from exploitation which are worth careful consideration. The degree of control as shared between the managerial and the investing groups will vary, then, with the risk of the investment, and with the skill and broad inclusiveness of the managerial group. Appropriate safeguards for any type of control structure are not difficult to devise. Where the investor group and the managerial group are one, the control problem is for the moment simple, but, on the other hand, the inevitable separation of interests can more easily be provided against at that early stage.

ABSENTEE CONTROL

The evils of absentee ownership and control are universally recognized, though far from universally acknowledged. Where absentee control exists legally, as it does in most of the large corporations, there is present, about nineteen years in twenty, an "inside" real control based upon the ownership of any percentage of the vote from Mr. Havermeyer's 7 per cent up; and on the twentieth year there is a struggle for this "inside" control. Unfortunately, for the general run of efficiency, the term "inside" usually means inside from a financial point of view, not from an operating point of view. In the past, "inside" control has sometimes meant financial exploitation, but has seldom meant a concentration of emphasis upon operating efficiency. No man in active contact with production pretends that hiring managers to make good showings on balance sheets is the last word in efficiency methods. Moreover, where directors are by virtue of their own real business vitally interested in up and down fluctuations of the prices of stock, a view of industrial efficiency, which takes into account all the human factors and looks ahead for long-time values, can hardly be expected to become automatic. The evils of absentee control have been salved over by devious subterfuges and greatly minimized by the fact that competitors usually suffer from the same disease, but these accidental and temporary palliations can give little satisfaction to the engineering mind.

As to the share in control appropirate to the labor force, it is clear that, as with investors, they have a point of view which must in justice be taken into account upon such subjects as fluctuating employment, which affects the risk of their steady livelihood, upon wages and hours and the other labor policies of management. Hence, the development of works councils and joint advisory committees is a natural step not only in justice to labor but also in the interests of wise management of the corporation.

Clearly, therefore, a corporation structure, as safely and as wisely adapted to its purpose as any of the great machines it may own, would provide for appropriate contracts for return to capital, some degree of managerial partnership, some real provision for the voice of the employee to be taken into account in settling the problems which vitally concern him and a corresponding share to the employee in the ups and downs of the corporation's profit.